CLAIMS

1. Use of a polynucleotide fragment comprising the PKCγ gene encoding the type 1 subtype of protein kinase C in the manufacture of a medicament for treating a neurodegenerative disorder.

2. Use of a polynucleotide fragment according to claim 1 wherein the medicament is used to treat mammals.

3. Use of a polynucleotide fragment according to claim 1 wherein the medicament is used to treat humans.

4. Use of a polynucleotide fragment according to any preceding claim wherein the degenerative disorder is a degenerative disorder of the central nervous system.

5. Use of a polynucleotide fragment according to claim 4 wherein the degenerative disorder of the central nervous system is Alzheimer's Disease.

6. Use of a polynucleotide fragment according to claim 4 wherein the degenerative disorder of the central nervous system is associated with dopaminergic cell degeneration.

7. Use of a polynucleotide fragment according to claim 4 wherein the degenerative disorder of the central nervous system is a neurodegenerative disorder associated with movement impairment.

8. Use of a polynucleotide fragment according to either of claims 6 or 7 wherein the neurodegenerative disorder is selected from the group comprising Parkinson's Disease, Huntington's Disease/Chorea, Dementia with Lewy bodies, Multiple-system atrophy, Progressive supranuclear palsy, cortical-basal ganglionic (corticobasal) degeneration, vascular Parkinsonism and ballism.

9. Use of a polypeptide comprising protein kinase C type 1 in the manufacture of a medicament for treating a neurodegenerative disorder.

10. Use of a polypeptide according to claim 9 wherein the medicament is used to treat mammals.

11. Use of a polypeptide according to claim 9 wherein the medicament is used to treat humans.

12. Use of a polypeptide according to any of claims 9 to 11 wherein a degenerative disorder is a degenerative disorder of the central nervous system.

13. Use of a polypeptide according to claim 12 wherein the degenerative disorder of the central nervous system is Alzheimer's Disease.

14. Use of a polypeptide according to claim 12 wherein the degenerative disorder of the central nervous system is associated with dopaminergic cell degeneration.

15. Use of a polypeptide according to claim 12 wherein the degenerative disorder of the central nervous system is a neurodegenerative disorder associated with movement impairment.

16. Use of a polypeptide according to either of claims 14 or 15 wherein the neurodegenerative disorder is selected from the group comprising Parkinson's Disease, Huntington's Disease/Chorea, Dementia with Lewy bodies, Multiple-system atrophy, Progressive supranuclear palsy, cortical-basal ganglionic (corticobasal) degeneration, vascular Parkinsonism and ballism.

17. Use of a polypeptide according to any of claims 9 to 16 wherein the polypeptide is synthetic.

18. A method of testing an animal thought to have a neurodegenerative disorder comprising detecting the presence of mutation in the PKCγ gene or its associated promoter.

19. A method of testing an animal thought to be predisposed to having a neurodegenerative disorder comprising detecting the presence of mutation in the PCKγ gene or its associated promoter.

20. A method according to either of claims 18 or 19 wherein the animal is a mammal.

21. A method according to claim 20 wherein the mammal is a human.

22. A method according to either of claims 18 and 19 wherein the neurodegenerative disorder is a degenerative disorder of the central nervous system.

23. A method according to claim 22 wherein the degenerative disorder of the central nervous system is Alzheimer's Disease.

24. A method according to claim 22 wherein the degenerative disorder of the central nervous system is associated with dopaminergic cell degeneration.

25. A method according to claim 22 wherein the degenerative disorder of the central nervous systems is a neurodegenerative disorder associated with movement impairments.

26. A method according to either of claims 24 or 25 wherein the neurodegenerative disorder is selected from the group comprising Parkinson's Disease, Huntington's Disease/Chorea, Dementia with Lewy bodies, Multiple-system atrophy, Progressive supranuclear palsy, cortical-basal

ganglionic (corticobasal) degeneration, vascular Parkinsonism and ballism.

27. A method according to either of claims 18 or 19 wherein the mutation results in a truncated product from the PKCγ gene being produced.

28. A method according to claim 27 wherein the mutation occurs in the 5' half of the gene.

29. A method according to claim 28 wherein the mutation is a point mutation at position 841 of the rat PKCγ gene or a similar region of the PKCγ gene from another species.

30. A method according to either of claims 18 or 19 wherein detection of the presence of the mutation in the PKCγ gene is achieved by detecting altered levels of the mRNA transcripts or mRNA precursor.

31. A method according to either of claims 18 or 19 wherein the mutation in the PKCγ gene is detected using antibodies raised to the truncated PKC type I polypeptide.

32. Use of a truncated PKCγ polynucleotide fragment for promoting nervous system degeneration for the production of animal models.

33. Use of a limited PKC type I polypeptide for promoting nervous system degeneration for the production of animal models.

34. Use of a PKCγ polynucleotide fragment encoding the PKC type I polypeptide for preventing, delaying, treating or inhibiting degeneration of nervous system.

35. Use of a PKC type I polypeptide for preventing, delaying, treating or inhibiting degeneration of nervous system.

36. A polynucleotide fragment encoding the PKC type I polypeptide for use in gene therapy.

37. Use of a PKCγ type I polypeptide for the identification of compounds for use in the treatment of neurodegenerative disorders.

38. An antibody specific for an epitope(s) located on a truncated polypeptide produced from the PKCγ gene.

39. An antibody according to claim 38 wherein the epitope(s) is/are located in the C terminal half of the PKC type I polypeptide.

40. An antibody according to claim 42 wherein the C terminal half of the polypeptide begins at amino acid number 282 and ends at the C terminus of the native polypeptide.

41. An antibody according to any of claims 38 to 40 wherein the antibody is a monoclonal antibody.

42. The monoclonal antibody according to claim 41 wherein the monoclonal antibody has been humanised.

43. Use of an antibody according to claims 38 - 42 for the manufacture of a medicament for preventing, delaying, treating or inhibiting degeneration of the nervous system.

44. Use of an antibody according to claims 38 - 42 in a diagnostic assay for testing an human thought to have or be predisposed to having a neural degenerative disorder.